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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/792,131

03/04/2004

Jik-Dong Kim

P-0652

3913

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EXAMINER

BURD, KEVIN MICHAEL

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

07/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/792,131

Applicant(s)

KIM, JIK-DONG

Examiner

Kevin M. Burd

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/16/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on 5/16/2007 is acknowledged. The traversal is on the ground that the search and examination of the entire application can be made without serious burden. This is found persuasive and the previous requirement for the restriction is withdrawn. The pending claims 1-30 will be examined on the merits.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Walton et al (US 2003/0043732).

Regarding claims 1 and 3-6, Walton discloses a data transmission apparatus in a wireless system shown in figure 4A. The apparatus comprises an encoding unit 412 and modulating units 322a-322i. The modulated data is amplified to a target power for a channel gain (figure 2A, blocks 218 and 226).

Regarding claim 2, Walton discloses the encoder 412 convolutionally encodes the data (paragraph 0032). Convolutional encoding schemes are carried out on segments of data and introduce error-detecting redundancy. An interleaver 414 receives the encoded data. Demux 424 converts the serial data into parallel signals.

Regarding claim 7, Walton discloses a data transmission method in a wireless system as shown in figure 2A. Channel power gain is compared to a power gain threshold to determine if a channel is to be selected for use. Good channels are selected where bad channels are not used (abstract).

Regarding claim 8, Walton discloses the transmitter system has knowledge of the gain of the transmission path between the transmitter and receiver (paragraph 0034).

Regarding claims 9, 13 and 14, a channel is used for transmission if the gain is greater than a threshold (figure 2A).

Regarding claims 10 and 12, a channel is not used for transmission if the gain is less than a threshold (figure 2A).

Regarding claim 11, Walton discloses the transmission channels that are not used are erased (paragraph 0050).

Regarding claim 15, Walton discloses a data receiving apparatus shown in figure 6A. A demodulating unit 632 demodulates the received signal and decodes the data 636.

Regarding claim 16, Walton further discloses a plurality of demodulating units for demodulating a plurality of sub-channels in figure 7.

Regarding claim 17, Walton discloses the deinterleaver 634 and decoder 636 for restoring the originally transmitted data. Figure 5 discloses converting the parallel signals into a serial data stream.

Regarding claim 18, Walton discloses restoring the originally transmitted data as stated above. The decoder performs an erasure-error correction since by not using the channels in error, the decoder disregards bits those bits when reconstructing the transmitted data.

Regarding claims 19, 24 and 25, Walton discloses a data receiving method. Good channels are transmitted to the receiver where bad channels are not used (abstract). Data is stored and recovered in the receiver (figure 6A).

Regarding claims 20 and 23, a channel is used for transmission if the gain is greater than a threshold (figure 2A).

Regarding claims 21, 22 and 26, a channel is not used for transmission if the gain is less than a threshold (figure 2A).

Regarding claim 27, Walton discloses restoring the originally transmitted data as stated above. The decoder performs an erasure-error correction since by not using the

channels in error, the decoder disregards bits those bits when reconstructing the transmitted data.

Regarding claims 28 and 29, Walton discloses a data transmission apparatus for communicating between a transmitter and receiver using the method shown in figure 2A. Channel power gain is compared to a power gain threshold to determine if a channel is to be selected for use. Good channels are selected where bad channels are not used (abstract).

Regarding claim 30, Walton discloses restoring the originally transmitted data as stated above. The decoder performs an erasure-error correction since by not using the channels in error, the decoder disregards bits those bits when reconstructing the transmitted data.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin M. Burd
7/8/2007


KEVIN BURD
PRIMARY EXAMINER